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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,702	01/12/2004	Michael Krebs	HENK-0154/H5344	3428

38857 7590 03/29/2010
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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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03/29/2010

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL KREBS

Appeal 2009-005338
Application 10/755,702
Technology Center 1700

Decided: March 29, 2010

Before MICHAEL P. COLAIANNI, JEFFREY T. SMITH, and
KAREN M. HASTINGS, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 1, 2, 4-18, 21, 24, and 28-33, all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).¹

¹ In rendering this decision we have considered Appellant's Brief dated April 22, 2008.

We AFFIRM.

STATEMENT OF THE CASE

Claim 1 is illustrative of the subject matter on appeal, and is reproduced from the Claims Appendix to the Appeal Brief (“App. Br.”):

1. A process for producing a reactive polyurethane containing free isocyanate groups said process consisting of the step of reacting a monomeric asymmetrical diisocyanate with a polyhydric alcohol, wherein:
 - (a) the monomeric asymmetrical diisocyanate used contains at least 95% by weight of diphenylmethane-2,4'-diisocyanate (2,4'-MDI) and less than 5% by weight of 4,4'-MDI and 2,2'-MDI, the 2,2'-MDI content being under 0.4%, by weight;
 - (b) at least one diol with a number average molecular weight of 60 g/mol to 2,000 g/mol is used as the polyhydric alcohol;
 - (c) the ratio of isocyanate groups to hydroxyl groups is a value of 1.05:1 to 2.0:1; and
 - (d) the reactive polyurethane thereby obtained has a content of monomeric asymmetrical diisocyanate of at most 0.3% by weight.

THE REJECTION

Claims 1, 2, 4-18, 21, 24, and 28-33 stand rejected under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) as over Bolte, WO 00/05290, published PCT application dated February 3, 2000.²

² We refer to the English language equivalent document that has been filed in the present record on July 9, 2008.

PRINCIPLES OF LAW

Anticipation under 35 U.S.C. § 102 requires that a prior art reference sufficiently describe the claimed invention to have placed the invention in the possession of the public. *See Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1572 (Fed. Cir. 1992).

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103).

“[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Preda*, 401 F.2d 825, 826 (CCPA 1968).

ISSUE

Appellant initially argues that Bolte does not disclose the use of monomeric asymmetric diisocyanate as specified by the claimed invention. Appellant also argues that claim 1 uses the transitional phrase “consisting of” and therefore is distinguishable over the process of Bolte. Specifically, Appellant states “the Bolte application teaches that two steps are required to

obtain a suitable low monomeric isocyanate product whereas the instant claims provide a one-stop process to achieve this objective.” (App. Br. 4).³

Did the Examiner err in determining that Bolte describes a process for producing a reactive polyurethane containing free isocyanate groups (Component A) in a single stage process as required by claim 1.⁴

We answer this question in the negative. Therefore we affirm.

ANALYSIS

The Examiner found that Bolte describes a process for producing a reactive polyurethane containing free isocyanate groups (Component A) in a single stage process as required by the claimed invention. Specifically, in responding to Appellant's arguments, the Examiner states:

At page 14, line 20 to page 15, line 9, the reference discloses making the polyurethane prepolymer having terminal isocyanate groups, referenced as "component A" by the reference, by reacting difunctional isocyanate and difunctional polyol in which the diisocyanate may be "diphenyl methane-2,4'-diisocyanate" solely (page 15, line 7), which coupled with the reference's description of how much NCO to OH is required to obtain the isocyanate terminated polyurethane prepolymer, gives the instantly claimed method with no additional steps nor ingredients... (Ans. 11).

³ Appellant has not presented separate argument directed to the ratio of isocyanate groups to hydroxyl groups. Arguments not presented in Appellant's Brief are waived from further appellate review.

⁴ Appellant has not presented separate arguments for all the claims subject to the appealed rejections. Consequently, we will limit our discussion to independent claim 1. Any claim not separately argued will stand or fall with independent claim 1.

The Examiner properly determined Bolte places a person of ordinary skill in the art in possession of a process for producing reactive polyurethane containing free isocyanate groups in a single stage process. Bolte specifically discloses that the list of difunctional isocyanate provided on page 15 could have been used individually. This disclosure would meet the requirements of the reactants identified in part (a) of the claimed invention.⁵

Appellant argues that the Bolte disclosure appearing on pages 8 to 9 of the application is evidence of a two step polymerization process. (App. Br. 4 and 6). This disclosure does not detract from the disclosures appearing in the other portions of the Bolte reference. It appears that the portions of the Bolte reference identified by the Examiner for the production of component (A) are sufficient to place a person of ordinary skill in the art in possession of a single stage process.

Assuming arguendo that the description in Bolte, identified by the Examiner the production of component (A), is insufficient to establish anticipation, this disclosure would at least have provided a person of ordinary skill in the art with a reasonable expectation that the reactive polyurethane could have been produced in a single stage process.

Appellant in response to the obviousness rejection state that “it would not be obvious from the Bolte application, that a one stage process would be capable of producing a reactive polyurethane with a free monomeric isocyanate content of not more than 0.3%.” (App. Br. 7). This argument is not persuasive because Bolte describes the utilization of the ratio of isocyanate groups to hydroxyl groups that falls within the scope of the

⁵ Appellant did not specifically address the Examiner’s citation to pages 14 and 15 of Bolte in a responsive Brief.

Appeal 2009-005338
Application 10/755,702

claimed invention. (Bolte, p. 10, ll. 1-3). Appellant has not explained how the utilization of isocyanate groups and hydroxyl groups in the ratio identified in the reference would not produce reactive polyurethane that falls within the scope of the claimed invention.

Under these circumstances, we cannot conclude that the Examiner erred in determining that the appealed subject matter is anticipated and/or obvious under 35 U.S.C. §§ 102 and 103. Therefore, the Examiner's decision to reject claims 1, 2, 4-18, 21, 24, and 28-33 is affirmed.

CONCLUSION

The decision of the Examiner rejecting claims 1, 2, 4-18, 21, 24, and 28-33 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED

PL Initial:
sld

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